

ABSTRACT

A microreactor is configured to have a metal substrate having a microchannel portion on one surface thereof, a heater provided on the other surface of the metal substrate via an insulating film, a catalyst supported on the microchannel portion, and a cover member having a feed material inlet and a gas outlet and joined to the metal substrate so as to cover the microchannel portion. Since the microreactor uses the metal substrate having a high thermal conductivity and a small heat capacity, the efficiency of heat conduction from the heater to the supported catalyst becomes high, and the processing of the metal substrate is easy to facilitate the production.